IDAHO
DEPARTMENT OF FISH AND GAME

Jerry M. Conley, Director

ASHTON HATCHERY

Annual Report

1 October 1983 - 30 September 1984

by
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Fish Hatchery Superintendent II

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ABSTRACT

During the 1983-84 fish year, Ashton Hatchery received 5,096,720 eyed eggs. Henrys Lake cutthroat, Kamloop trout, brown trout and grayling were the four species hatched.

A total of 36,303 pounds of fish were produced at the Ashton Hatchery; this amounted to 3,244,340 fish. Some 3,309 pounds, numbering 2,557,750, were Henrys Lake cutthroat. Six hundred sixty-one thousand, five hundred (661,500) of these were planted back into Henrys Lake.

Fish feed cost for Ashton Hatchery was $10,373.80, and the hatchery fed 45,600 pounds of feed, giving a conversion rate of 1.256 pounds of feed for each pound of fish reared. Cost of feed per pound of fish was $.286.

The supply pond was excavated, and perforated pipe was placed in trenches of gravel. The entire pond area was then covered with earthen fill. The water quality was improved, and the reservoir for potentially diseased fish above the hatchery was eliminated.

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OBJECTIVES

Objectives for the Ashton Hatchery were:

To rear and distribute the following in 15 rivers and streams, 12 lakes and reservoirs of the five eastern Idaho counties that lie in Region 6:

a. 50,000 catchable rainbow trout,
b. 200,000 fingerling rainbow trout,
c. 350,000 fingerling Kamloop trout,
d. 500,000 fingerling Henrys Lake cutthroat trout,
e. 100,000 fingerling brook trout,
f. 400,000 fingerling brown trout,
g. 27,000 golden trout fry, and
h. 15,000 grayling fry.

INTRODUCTION

The state fish hatchery at Ashton is located in northern Fremont County, three miles northwest of the town of Ashton. The hatchery is situated at 5,275 feet above sea level. The water source is from Black Springs, which is located above the hatchery and is a part of Black Springs Creek that eventually flows into the Henrys Fork of the Snake River. The spring has a flow of 6 to 7 cfs. The temperature is now a constant 50^0F (10^0C) since the filling and piping of the supply pond.

The hatchery rearing facilities include a 2 million egg capacity incubating room supported by two fish rearing areas that include 600 cubic feet of inside troughs and 25,000 cubic feet of outside raceway system.

Other physical features at Ashton Hatchery include:

2 permanent employee's residences,
1 three-car garage,
1 metal building that houses the hatchery rearing area, incubator room, egg picking room, feed storage, office, shop, storage, restrooms and temporary crew quarters,
1 metal quonset hut, and
1 hay barn.

FISH PRODUCTION

Six species of fish were raised at Ashton Hatchery this year: rainbow trout, Kamloop trout, brown trout, Henrys Lake cutthroat, Bear Lake cutthroat and grayling.We received 5,096,720 eyed eggs. Of

these, 4,284,694 were from Henrys Lake Hatchery: 500,134 Kamloop from Trout Lodge, 300,192 brown trout from Plymouth Rock Trout Company and 11,700 grayling eggs from Daniels Hatchery in Wyoming.

From these eyed eggs we cultured and planted or transferred 2,557,750 Henrys Lake cutthroat, 408,650 Kamloop trout, 221,640 brown trout and 5,000 grayling. The total production for the year at Ashton Hatchery totaled 3,244,340 fish with 36,303 pounds produced.

FISH HEALTH

The general health of our fish at time of release was excellent. No major disease problems were encountered this year.

There were two minor outbreaks of bacterial gill disease due to overcrowding in the hatchery vats and one outbreak of Hexamita in the outside raceways.

The bacterial gill disease was controlled with copper sulfate flushes and the Hexamita with Epsom salts mixed with the feed.

FISH TRANSFERS

Throughout the year, fish were transferred to Ashton Hatchery from Grace Hatchery. A total of 211,250 Bear Lake cutthroat were transferred in January and reared until June, at which time they were transferred back to Grace Hatchery for marking and release. One hundred eighteen thousand, six hundred and fifty-one (118,651) rainbow fingerlings were transferred to Ashton Hatchery from Grace Hatchery; all but 57,000 were planted. The 57,000 are being held over for next spring's catchable plant. There were also 43,681 rainbow catchables transferred in and planted out from Ashton.

Fish transferred from Ashton Hatchery were: 49,000 Henrys Lake cutthroat fry to Mackay Hatchery, 121,625 brown trout fry to Mullan Hatchery and 20,800 rainbow fingerlings to Mackay Hatchery.

FISH RELEASES

Fish planted from Ashton Hatchery this year are as follows:

Table 1. Fish planted from Ashton Hatchery, October 1, 1983 to September 30, 1984.

	Size 1		Size 2		Size 3	
Species	No.	Pounds	No.	Pounds	No.	Pounds
R1			176,820	4,420	96,475	22,625
BN			100,015	485		
K1			408,650	5,975		
GR	5,000					
C3	2,508,750	3,253				

Henrys Lake Hatchery had an excellent egg take of some 6.5 million eggs. Ashton Hatchery received 4,284,694 of these eyed eggs. Of the resulting fry, 1,838,250 excess were planted as button-up fry. They were planted out of the incubators into the tributaries of the upper Teton River Basin. The remaining 661,500 fish were planted into Henrys Lake in late September at Targhee Creek state boat dock and in the ladder at Henrys Lake Hatchery.

FISH FEED UTILIZED

Ashton Hatchery fish consumed the following feed (Table 2):

Table 2. Feed consumed at Ashton Hatchery from October 1, 1983, to September 30, 1984.

Size	Pounds	Cos
tarter	150	38.00
lo. 1 fry	700	184.45
lo. 2 fry	1,700	448.46
lo. 3 fry	4,500	1,229.10
lo. 4 fry	7,500	1,625.80
oarse Crumble	9,000	2,070.00
/32	2,500	506.75
/8	1,500	303.45
/32	16,150	3,117.19
edicated No. 4 (Tm-50)	1,900	850.60
Totals	45,600	10,373.80

This calculates out to 1.256 pounds of feed to produce each pound of fish flesh. Cost of feed per pound of fish would be $0.286.

HATCHERY IMPROVEMENTS

Ashton Hatchery has had a history of disease, largely coming from wild and escaped fish in the spring supply pond. Moss, algae and silt originating in the supply pond and plugging screens and incubators were also a constant problem.

This fall, the construction crew excavated parts of the pond removing mud and silt. They then laid perforated pipe of 12- and 18-inch diameter in gravel filled trenches. These pipes were inter-connected and terminated at the head box. The pond then was covered with earthen fill. The water **is** collected _and flows through the pipes to the head box.

By covering the supply pond, the water quality was improved, and eliminating the wild fish population allows a chance to have a disease-free hatchery.

While the construction crew was here, they put dividing walls down the center of the top section of the four outside raceways. This makes it easier to manage small lots of fish and is better for starting small fish outside.

SPECIAL STUDIES

The medicated feed that was fed at Ashton Hatchery this year was Tm-50 at 11%. This was fed to the cutthroat released into Henrys Lake. They were fed this special diet for 14 days to mark them for future growth and population studies going on at Henrys Lake.

MISCELLANEOUS ACTIVITIES

During the year, Ashton Hatchery experienced the visitation of approximately 1,500 visitors. The biggest visitor load occurrred in the spring and early summer. The bulk of visitors were from schools in the area and Boy Scout troops.

HATCHERY NEEDS

All of the buildings on the hatchery grounds are in dire need of painting. A new four-wheel-drive pickup is needed to plow snow and plant fish in the spring. This would also allow the hatchery personnel to assist with enforcement during the winter months.

ACKNOWLEDGEMENTS

Hatchery staffing during the year included:

Roland Warren, Fish Hatchery Superintendent II; Ted Packard, Fish Hatchery Superintendent I; Bill Carter, Fish Hatchery Superintendent I; Clair Kofoed, Bio-Aide; Rob Hill, Bio-Aide and Kathy Bowcutt, SYEP.